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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/037,297	12/21/2001	Tao Wu	05288.00021	4505

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EXAMINER

COFFY, EMMANUEL

ART UNIT	PAPER NUMBER
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2157

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/037,297

Applicant(s)

WU ET AL.

Examiner

Emmanuel Coffy

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 21 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 17-23 is/are rejected.
- 7) ☐ Claim(s) 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10 Feb 2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the application filed on 21 December 2001. Claims 1-23 are pending. Claims 1-23 are directed to a method and system for a "Cache on Demand."

Claim Rejections - 35 USC § 112

2. Claim 5 recites the limitation "the" in by the cache. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 and 22 are rejected under 35 U.S.C. §102(e) as being anticipated by Chong, Jr. (US 6,397,267.)

Chong, Jr. teaches the invention substantially as claimed including a system and a method to transfer data between a host computer and a storage device. (See abstract).

Claim 1:

A method of transmitting requests and content at a cache computer, wherein a first computer device and a second computer device are coupled to the cache computer and the first computer device requests content from the second computer device; the method comprising the steps of: (See Fig. 4A)

(a) receiving a cache request from the second computer device; and (See col. 7, lines 16-29.)

(b) receiving at the cache computer non-requested content from the second computer device, wherein the non-requested is content other than content requested by the first computer device. (See col. 7, lines 30-33.)

Claim 22:

A computer-readable medium containing computer-executable instructions for causing a cache computer coupled to a first computer device and a second computer device to perform the steps comprising: (See Fig. 4A) (Software is an inherent part of a computer.)

(a) receiving a cache request from the second computer device; and (See col. 7, lines 16-29.)

(b) receiving at the cache computer non-requested content from the second computer device, wherein the non-requested is content other than content requested by the first computer device. (See col. 7, lines 30-33.)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-4 are rejected under 35 U.S.C. §103(a) as being unpatentable over Chong, Jr. (US 6,397,267) in view of Cieslak et al. (US 6,832,252.)

Chong, Jr. teaches the invention substantially as claimed including a system and a method to transfer data between a host computer and a storage device. (See abstract).

Claim 2:

The method of claim 1, further including:

(c) transmitting a cache invitation to the second computer device. (See col.7, lines 45-47.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to use the invention taught by Chong, Jr.

Claim 3:

The method of claim 2, wherein the cache invitation is located within a header of a request for content.

Chong, Jr. does not expressly disclose the limitations of above claim. However, Cieslak unambiguously teach a 20-byte header being added to a data packet.

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the invention taught by Chong, Jr. with adding a header to the request as articulated by Cieslak because routing and execution of the request is better achieved.

Claim 4:

The method of claim 1, wherein (a) comprises:

(d) receiving a request for cache memory space from the second computer. (See col. 7, lines 41-44.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to use the invention taught by Chong, Jr.

5. Claims 5-9 are rejected under 35 U.S.C. §103(a) as being unpatentable over Chong, Jr. (US 6,397,267)) in view of Cieslak et al. (US 6,832,252) and in further view of Einarson et al. (US 6,704,781.)

Chong, Jr. teaches the invention substantially as claimed including a system and a method to transfer data between a host computer and a storage device. (See abstract).

Claim 5:

The method of claim 4, wherein the request includes terms that have previously been agreed upon by the cache server and the second computer device.

Neither Chong, Jr. nor Cieslak expressly disclose previously "agreed" upon terms. However, Einarson discloses devices that are designed to respond only to certain terms. The Examiner notes that a device, which is an inanimate object, cannot agree to anything but rather is designed to respond in a specific way.

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the invention taught by Chong, Jr. and Cieslak with devices configured to respond only to certain terms avoiding any dispute by eliminating ambiguities.

Claim 6:

The method of claim 4, wherein the request comprise a fee for use of the cache memory space.

Neither Chong, Jr. nor Cieslak expressly disclose a fee for the use of the cache. However, Einarson discloses a fee for the use of the cache at col. 2, lines 36-38.

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the invention taught by Chong, Jr. and Cieslak with a fee for the use of the cache as taught by Einarson because caching services may readily be charged.

Claim 7:

The method of claim 6, wherein the fee is a fee that will be paid by the second computer device.

Neither Chong, Jr. nor Cieslak expressly disclose a fee that will be paid by the second computer device. However, Einarson discloses such a fee that will be paid by the second computer device at col. 4, lines 30-42 and col. 6, lines 34-39.

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the inventions taught by Chong, Jr. and Cieslak with a fee that will be paid by the server as taught by Einarson because the server makes the request.

Claim 8:

The method of claim 4, wherein the request further includes a requested amount of cache memory space.

Neither Chong, Jr. nor Cieslak expressly disclose a requested amount of storage. However, Einarson discloses requested amount of storage at col. 3, line 4.

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the inventions taught by Chong, Jr. and Cieslak with

requested amount of storage as taught by Einarson because memory allocation is easier when the amount of storage is known and charges are readily computed.

Claim 9:

The method of claim 4, wherein the non-requested content comprises objects of a web page.

Neither Chong, Jr. nor Cieslak expressly disclose objects of a web page. However, Einarson discloses requested web page objects at col. 2, line 66 –col. 3, line 22.

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the inventions taught by Chong, Jr. and Cieslak with web page objects as taught by Einarson because sites' contents may be cached by providing the sites URL.

6. Claims 10-12 are rejected under 35 U.S.C. §103(a) as being unpatentable over Chong, Jr. (US 6,397,267)) in view of Cieslak et al. (US 6,832,252) and in further view of Aviani et al. (US 5,950,205.)

Claim 10:

The method of claim 1, further including: (c) receiving at the cache computer the identification of non-requested content.

Neither Chong, Jr. nor Cieslak expressly disclose receiving identification of non-requested content. However, Aviani discloses receiving identification of non-requested content at col. 5, line 51–56.

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the inventions taught by Chong, Jr. and Cieslak with

receiving identification of non-requested content as taught by Aviani because the content can be identified.

Claim 11:

The method of claim 10, wherein the identification of non-requested content comprises memory addresses of non-requested content.

Neither Chong, Jr. nor Cieslak expressly disclose memory addresses of non-requested content. However, Aviani discloses memory addresses of non-requested content at col. 5, line 51–56.

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the inventions taught by Chong, Jr. and Cieslak with receiving identification of non-requested content as taught by Aviani because the content can be identified.

Claim 12:

The method of claim 10, in response to (c) further including: (e) requesting the non-requested content from the second computer.

Chong, Jr. does not expressly disclose the limitations of above claim. However, Cieslak unambiguously teach that any computer can be the cache requester at col. 6, lines 5-11.

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the invention taught by Chong, Jr. with the request as articulated by Cieslak because the system is more flexible by allowing any computer to make the request.

7. Claims 13-20, and 23 are rejected under 35 U.S.C. §103(a) as being unpatentable over Einarson et al. (US 6, 704,781) in view of Chong, Jr. (US 6,397,267.)

Einarson teaches the invention substantially as claimed including a method of providing caching services to a server in a network. (See abstract)

Claim 13:

A method of transmitting content from a first computer device to a second computer device, wherein the first computer device and the second computer device are coupled to a cache computer device, the method comprising the steps of:

(a) receiving from the cache computer device, a request for content; (See col. 2, lines 9-22.)

(b) transmitting to the cache computer device the requested content; (See col. 2, lines 9-22.)

(c) transmitting to the cache computer device a request for use of a cache memory; and (See col. 2, line 67-col. 3, line 5.)

(d) after accepting terms for the use of the cache memory, transmitting to the cache computer device non-requested content, wherein the non-requested is content other than content requested by the cache computer device. (See col. 6, line 34-38) (sending an authorization is equated to accepting the terms.)

Einarson does not explicitly disclose transmitting to the cache computer device non-requested content. However, Chong teaches the concept of transmitting non-requested content at col. 7, lines 27-34.

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the invention taught by Einarson with non-requested content as articulated by Chong, Jr. in anticipation of future read request.

Claim 14:

The method of claim 13, wherein the cache computer device comprises an access router coupled to an access network.

Einarson does not explicitly disclose an access router coupled to an access network. However, as shown in Fig. 4A Chong discloses a switch coupled to the Internet. The switch acts as a router. See col. 12, lines 4-19.

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the invention taught by Einarson with the router as articulated by Chong, Jr. because this arrangement improves reliability for data storage and retrieval by reducing latency in data transfers.

Claim 15:

The method of claim 13, wherein the request in (c) comprises a proposed fee for use of the cache memory. (See col. 2, lines 35-41.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to use the invention taught by Einarson.

Claim 16:

The method of claim 13, further including the steps of: (e) determining when the first computer device updates the non-requested content; and (f) transmitting updated non-requested content to the second computer device when the first computer device updates the non-requested content.

The above is objected to for being dependent upon a rejected claim.

Claim 17:

The method of claim 13, wherein the request in (c) comprises a request for cache memory space. (See col. 4, lines 8-10 and col. 3, lines 3-6.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to use the invention taught by Einarson.

Claim 18:

The method of claim 13, wherein the request in step (c) comprises time duration. (See col. 3, lines 1-5.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to use the invention taught by Einarson.

Claim 19:

The method of claim 13, wherein the request in step (c) comprises a proposed fee. (See col. 2, lines 35-41.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to use the invention taught by Einarson.

Claim 20:

The method of claim 13, further including the steps of: (e) receiving a denial in response to the request for the use of the cache memory; (f) receiving proposed terms for use of the cache memory; and (g) transmitting to the first computer device an approval of the proposed terms for use of the cache memory. (See col. 4, lines 22-42.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to use the invention taught by Einarson.

Claim 23:

An access router coupled to a local computer and a website, the access router including a cache module configured to perform the steps comprising: (See Fig. 2)

(a) receiving a cache request from the website; and (See col. 4, line 66 –col. 5, line 5.)

(b) receiving non-requested content from the website, wherein the non-requested is content other than content requested by the local computer.

Einarson does not explicitly disclose transmitting to the cache computer device non-requested content. However, Chong teaches the concept of transmitting non-requested content at col. 7, lines 27-34.

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the invention taught by Einarson with non-requested content as articulated by Chong, Jr. in anticipation of future read request.

8. Claim 21 is rejected under 35 U.S.C. §103(a) as being unpatentable over Einarson et al. (US 6, 704,781) in view of Cieslak et al. (US 6,832,252.)

Einarson teaches the invention substantially as claimed including a method of providing caching services to a server in a network. (See abstract)

Einarson does not expressly disclose the limitations of above claim. However, Cieslak unambiguously teach a 20-byte header being added to a data packet.

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the invention taught by Einarson with adding a

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header to the request as articulated by Cieslak because routing and execution of the request is better achieved.

Conclusion

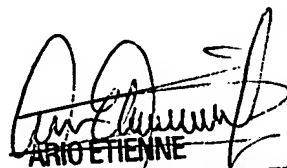
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel Coffy whose telephone number is (571) 272-3997. The examiner can normally be reached on 8:30 - 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-3997. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Fev 4, 2005


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